FIG. 1

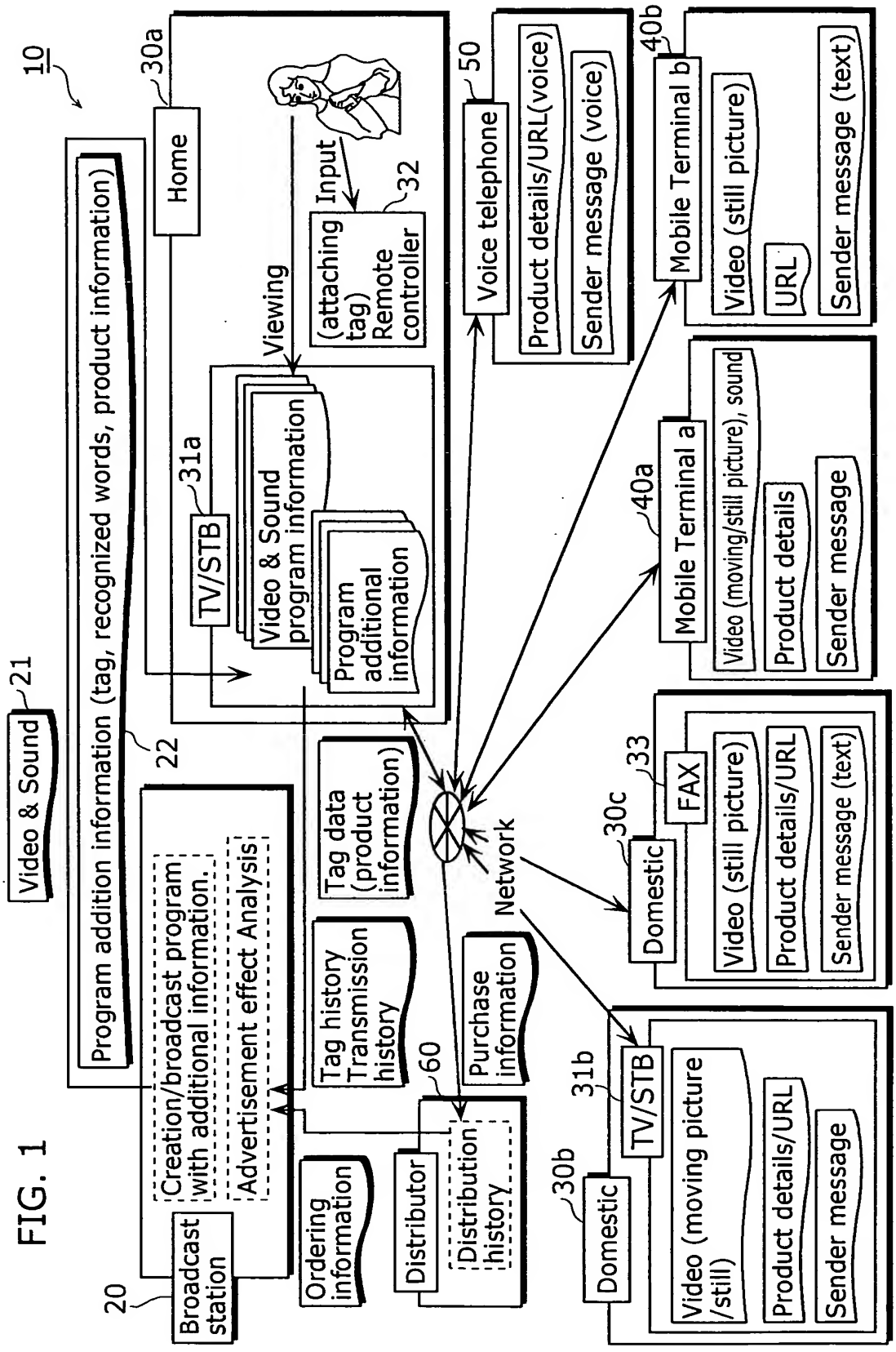

10
Video & Sound
21
Program addition information (tag, recognized words, product information)
22
Creation/broadcast program with additional information.
Advertisement effect Analysis
Broadcast station
20
Ordering information
Distributor
Distribution history
60
Tag history Transmission history
Tag data (product information)
Purchase information
Network
30a
Home
TV/STB
31a
Video & Sound program information
Program additional information
Viewing
Input
(attaching tag) Remote controller
32
Voice telephone
50
Product details/URL(voice)
Sender message (voice)
Mobile Terminal b
40b
Video (still picture)
URL
Sender message (text)
Mobile Terminal a
40a
Video (moving/still picture), sound
Product details
Sender message
Domestic
30c
FAX
33
Video (still picture)
Product details/URL
Sender message (text)
Domestic
30b
TV/STB
31b
Video (moving picture /still)
Product details/URL
Sender message

FIG. 2

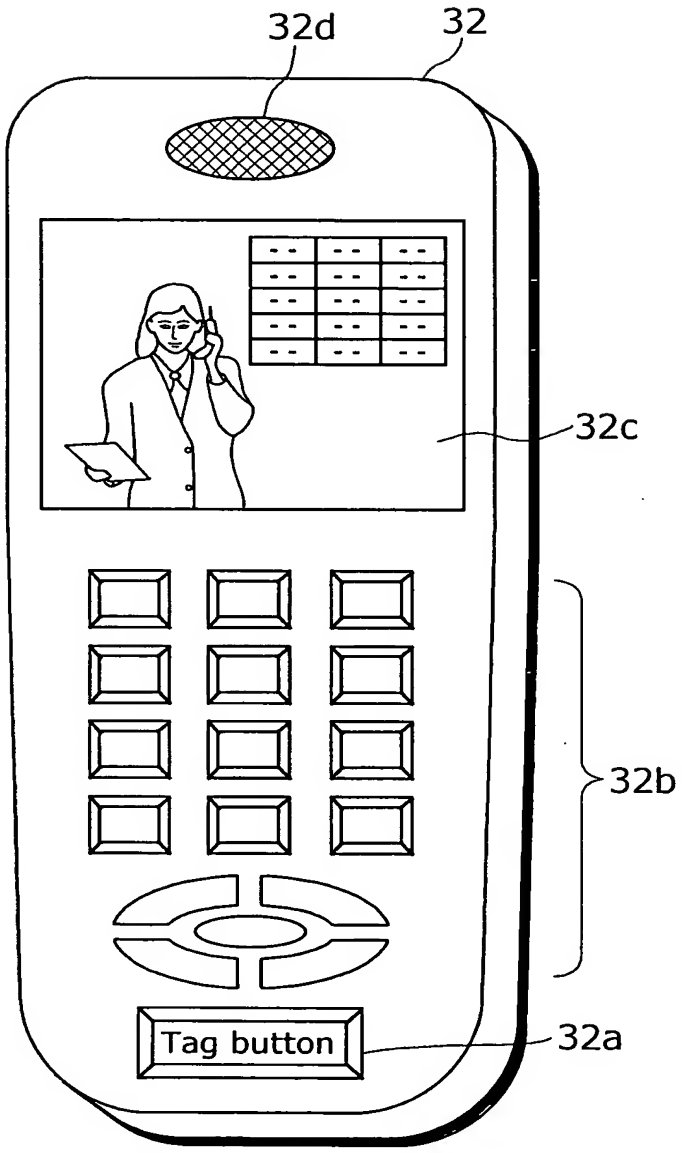


FIG. 3

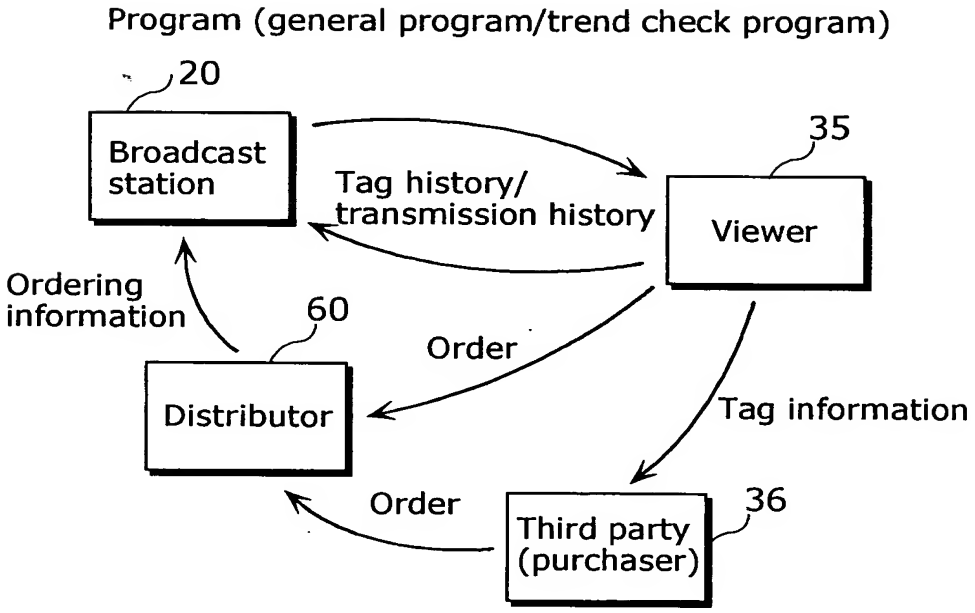

Program (general program/trend check program)
20
Broadcast station
35
Tag history/ transmission history
Viewer
Ordering information
60
Order
Distributor
Tag information
Order
Third party (purchaser)
36

FIG. 4

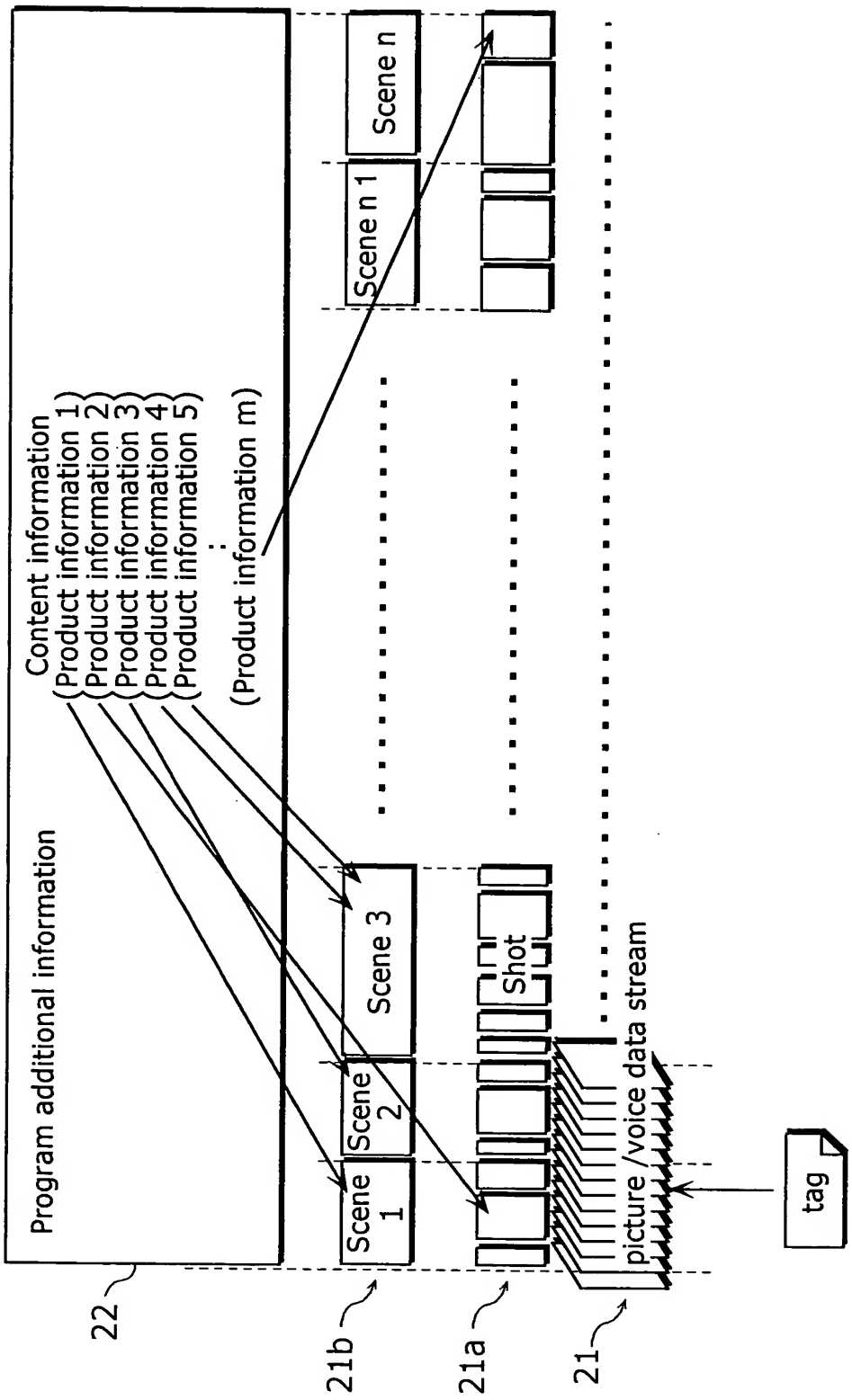

Program additional information
Content information
(Product information 1)
(Product information 2)
(Product information 3)
(Product information 4)
(Product information 5)
(Product information m)
Scene 1
Scene 2
Scene 3
Scene n 1
Scene n
Shot
picture /voice data stream
tag
22
21b
21a
21

FIG. 5

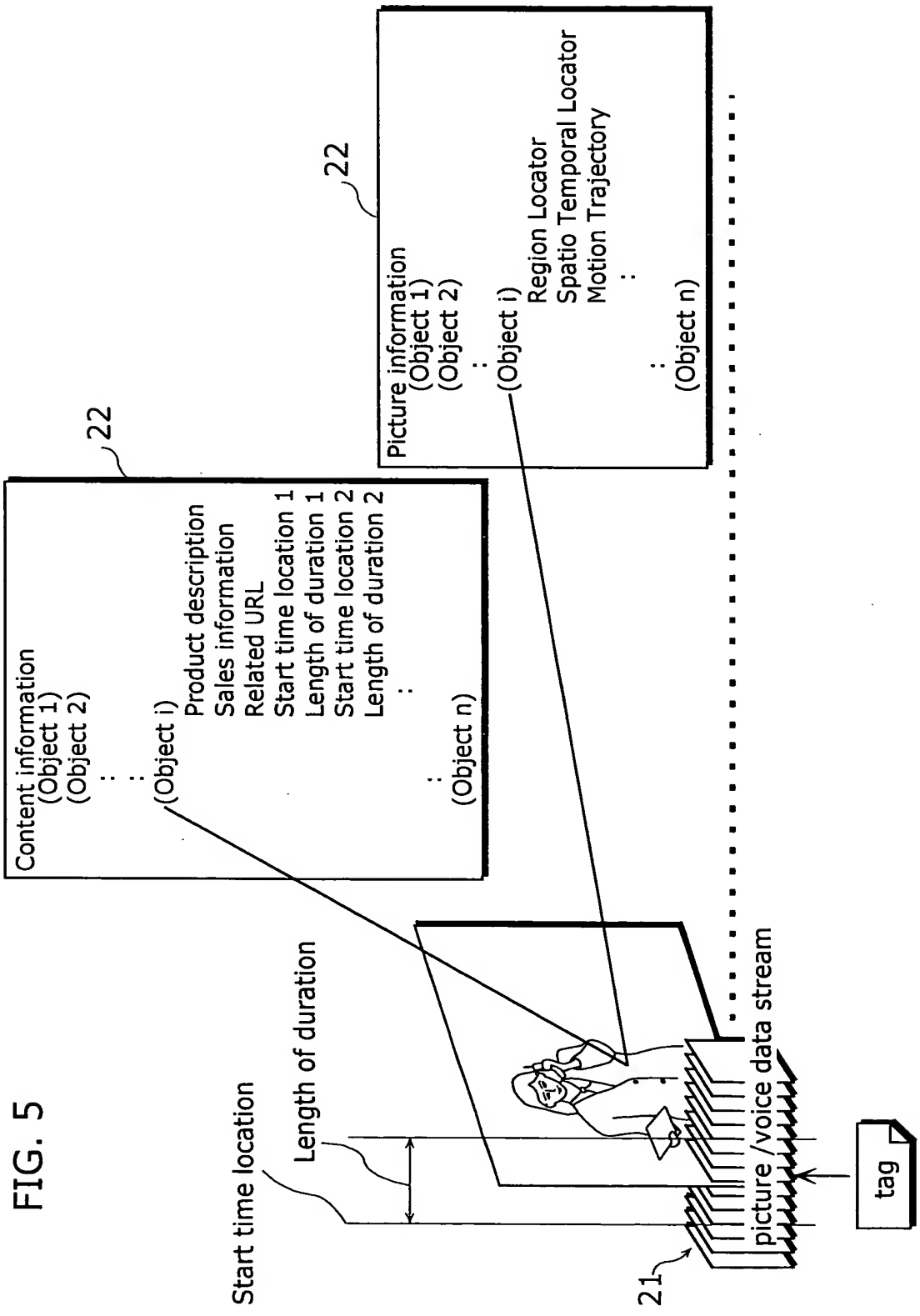

Content information
(Object 1)
(Object 2)
:
(Object i)
Product description
Sales information
Related URL
Start time location 1
Length of duration 1
Start time location 2
Length of duration 2
:
(Object n)
22
Picture information
(Object 1)
(Object 2)
:
(Object i)
Region Locator
Spatio Temporal Locator
Motion Trajectory
:
:
(Object n)
22
Start time location
Length of duration
picture /voice data stream
tag
21

FIG. 6

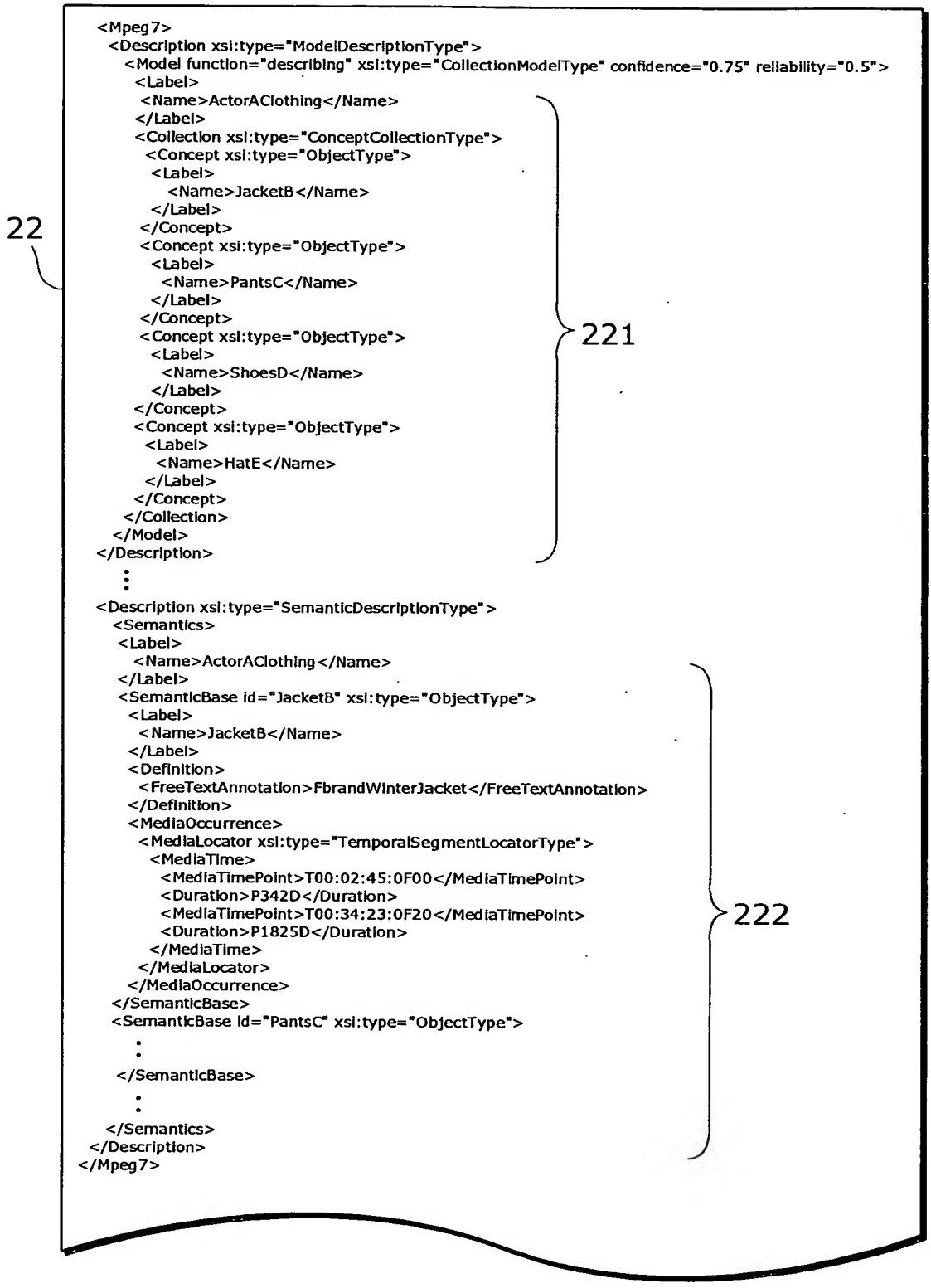

22
221
222
<Mpeg7>
<Description xsi:type="ModelDescriptionType">
<Model function="describing" xsi:type="CollectionModelType" confidence="0.75" reliability="0.5">
<Label>
<Name>ActorAClothing</Name>
</Label>
<Collection xsi:type="ConceptCollectionType">
<Concept xsi:type="ObjectType">
<Label>
<Name>JacketB</Name>
</Label>
</Concept>
<Concept xsi:type="ObjectType">
<Label>
<Name>PantsC</Name>
</Label>
</Concept>
<Concept xsi:type="ObjectType">
<Label>
<Name>ShoesD</Name>
</Label>
</Concept>
<Concept xsi:type="ObjectType">
<Label>
<Name>HatE</Name>
</Label>
</Concept>
</Collection>
</Model>
</Description>
<Description xsi:type="SemanticDescriptionType">
<Semantics>
<Label>
<Name>ActorAClothing</Name>
</Label>
<SemanticBase id="JacketB" xsi:type="ObjectType">
<Label>
<Name>JacketB</Name>
</Label>
<Definition>
<FreeTextAnnotation>FbrandWinterJacket</FreeTextAnnotation>
</Definition>
<MediaOccurrence>
<MediaLocator xsi:type="TemporalSegmentLocatorType">
<MediaTime>
<MediaTimePoint>T00:02:45:0F00</MediaTimePoint>
<Duration>P342D</Duration>
<MediaTimePoint>T00:34:23:0F20</MediaTimePoint>
<Duration>P1825D</Duration>
</MediaTime>
</MediaLocator>
</MediaOccurrence>
</SemanticBase>
<SemanticBase id="PantsC" xsi:type="ObjectType">
</SemanticBase>
</Semantics>
</Description>
</Mpeg7>"

FIG. 7

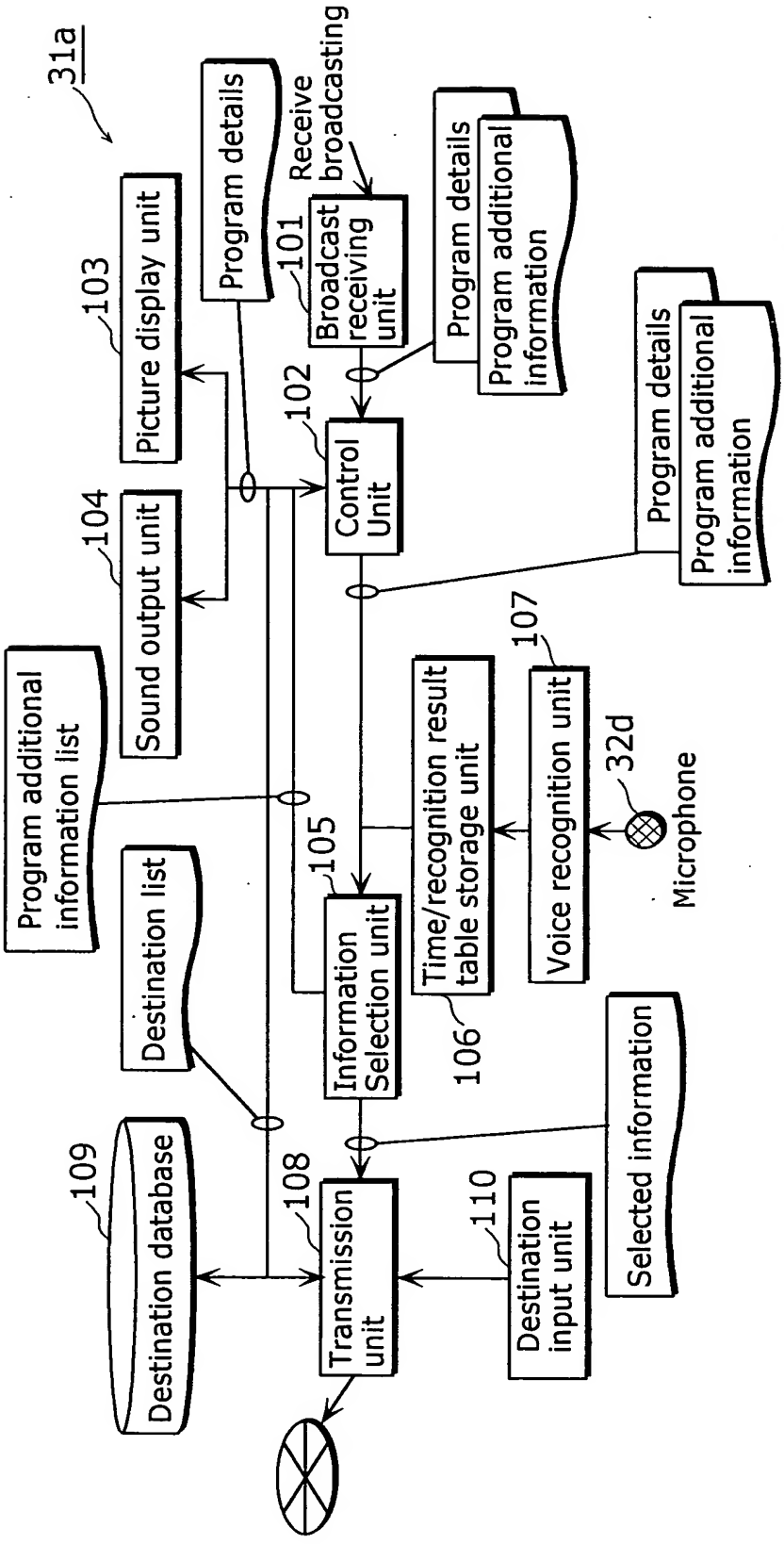

31a
Receive broadcasting
Program details
101
Broadcast receiving unit
Program details
Program additional information
103
Picture display unit
102
Control Unit
Program details
Program additional information
104
Sound output unit
Program additional information list
Destination list
105
Information Selection unit
Time/recognition result table storage unit
106
107
Voice recognition unit
32d
Microphone
Selected information
109
Destination database
108
Transmission unit
110
Destination input unit

FIG. 8

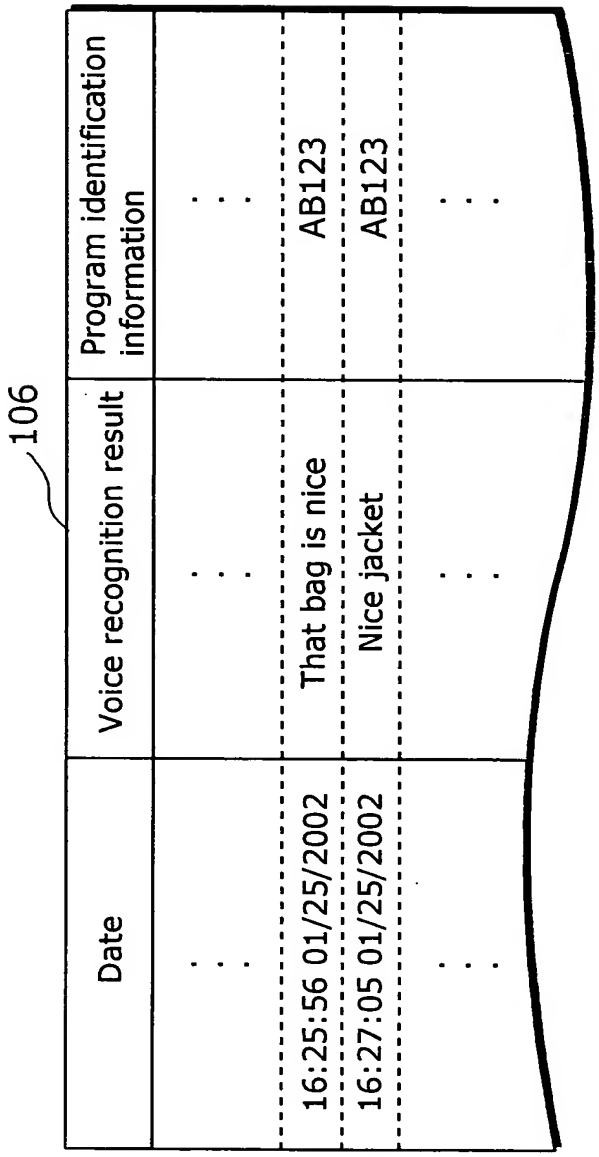

106
Date
Voice recognition result
Program identification information
16:25:56 01/25/2002
That bag is nice
AB123
16:27:05 01/25/2002
Nice jacket
AB123

FIG. 9

109

Name	Address	Moving picture	Still picture	Color	Sound	Voice	MIDI	Text	Font specification
A	A@aaa.aa.aaa	○	○	○	○	○	○	○	○
B	B@dococo.bb.bb	×	○	○	○	○	×	○	×
C	06 1234 5678	×	○	×	×	×	×	○	○

FIG. 10

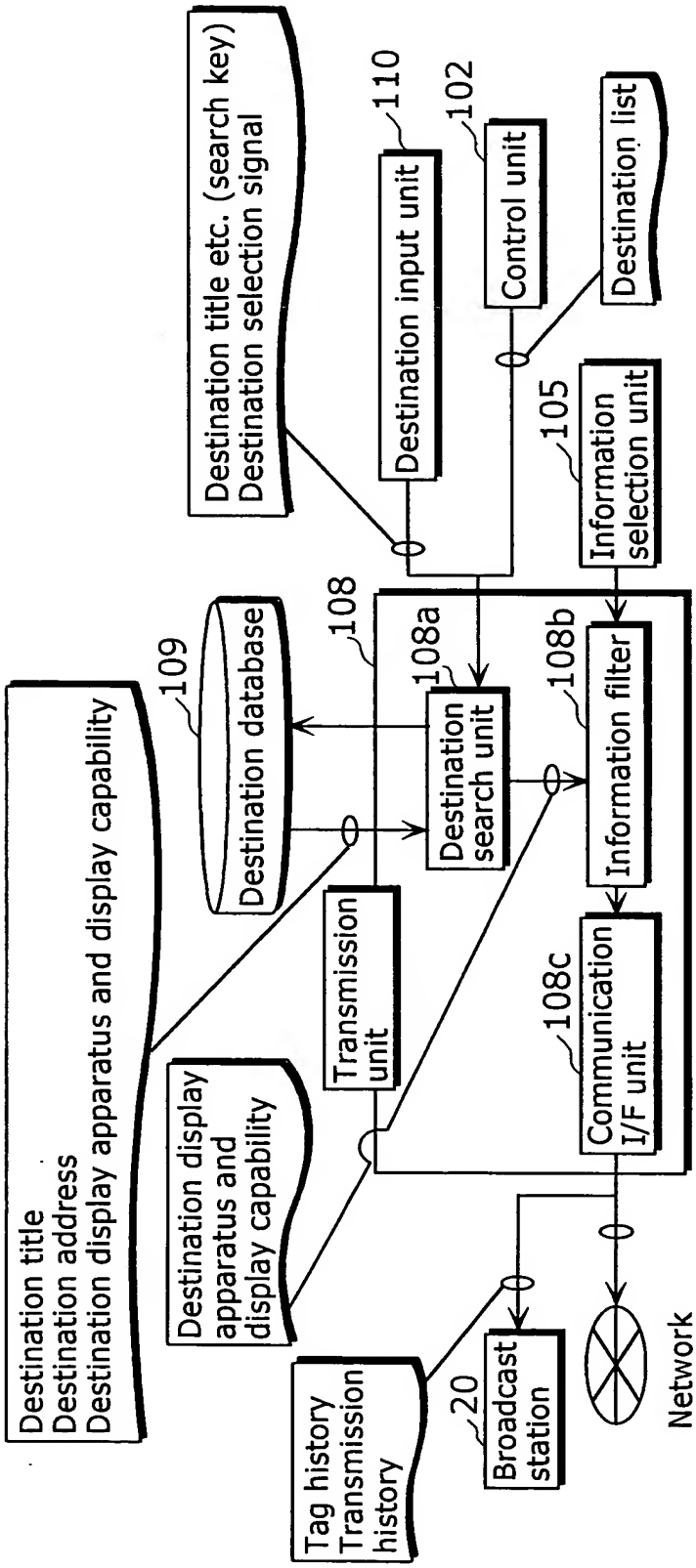

Destination title etc. (search key)
Destination selection signal
110
Destination input unit
102
Control unit
Destination list
105
Information selection unit
108
109
Destination database
108a
Destination search unit
108b
Information filter
Destination title
Destination address
Destination display apparatus and display capability
Transmission unit
108c
Communication I/F unit
Destination display apparatus and display capability
Tag history
Transmission history
20
Broadcast station
Network

FIG. 11

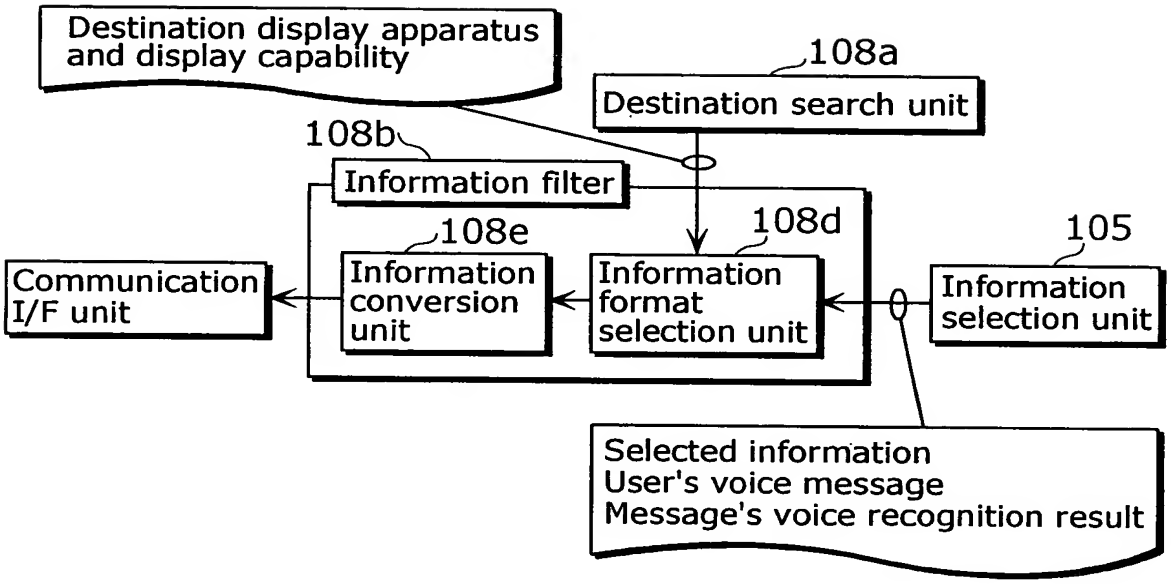

Destination display apparatus and display capability
108a
Destination search unit
108b
Information filter
108e
108d
105
Communication I/F unit
Information conversion unit
Information format selection unit
Information selection unit
Selected information
User's voice message
Message's voice recognition result

FIG. 12

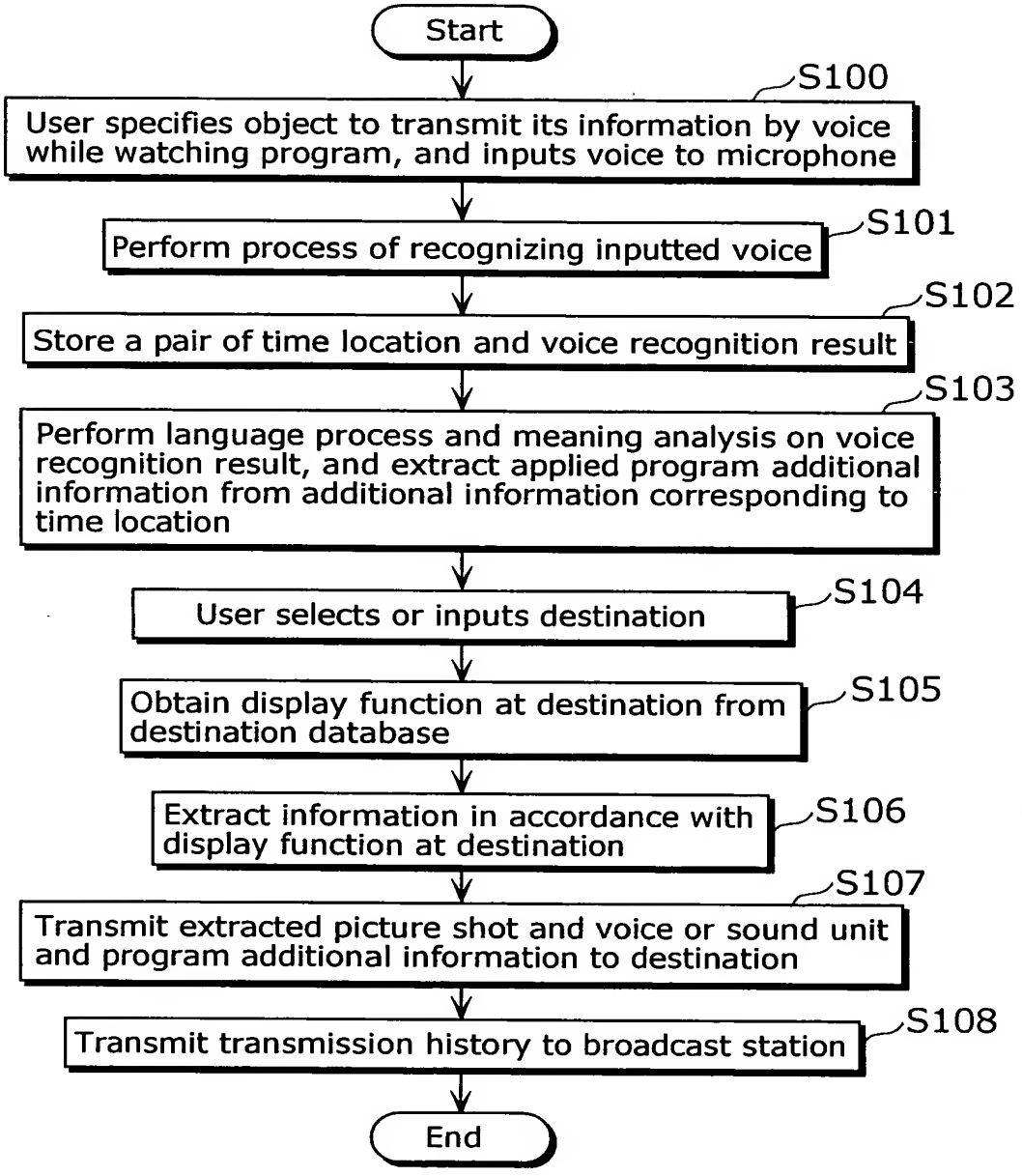

Start
S100
User specifies object to transmit its information by voice while watching program, and inputs voice to microphone
S101
Perform process of recognizing inputted voice
S102
Store a pair of time location and voice recognition result
S103
Perform language process and meaning analysis on voice recognition result, and extract applied program additional information from additional information corresponding to time location
S104
User selects or inputs destination
S105
Obtain display function at destination from destination database
S106
Extract information in accordance with display function at destination
S107
Transmit extracted picture shot and voice or sound unit and program additional information to destination
S108
Transmit transmission history to broadcast station
End

FIG. 13

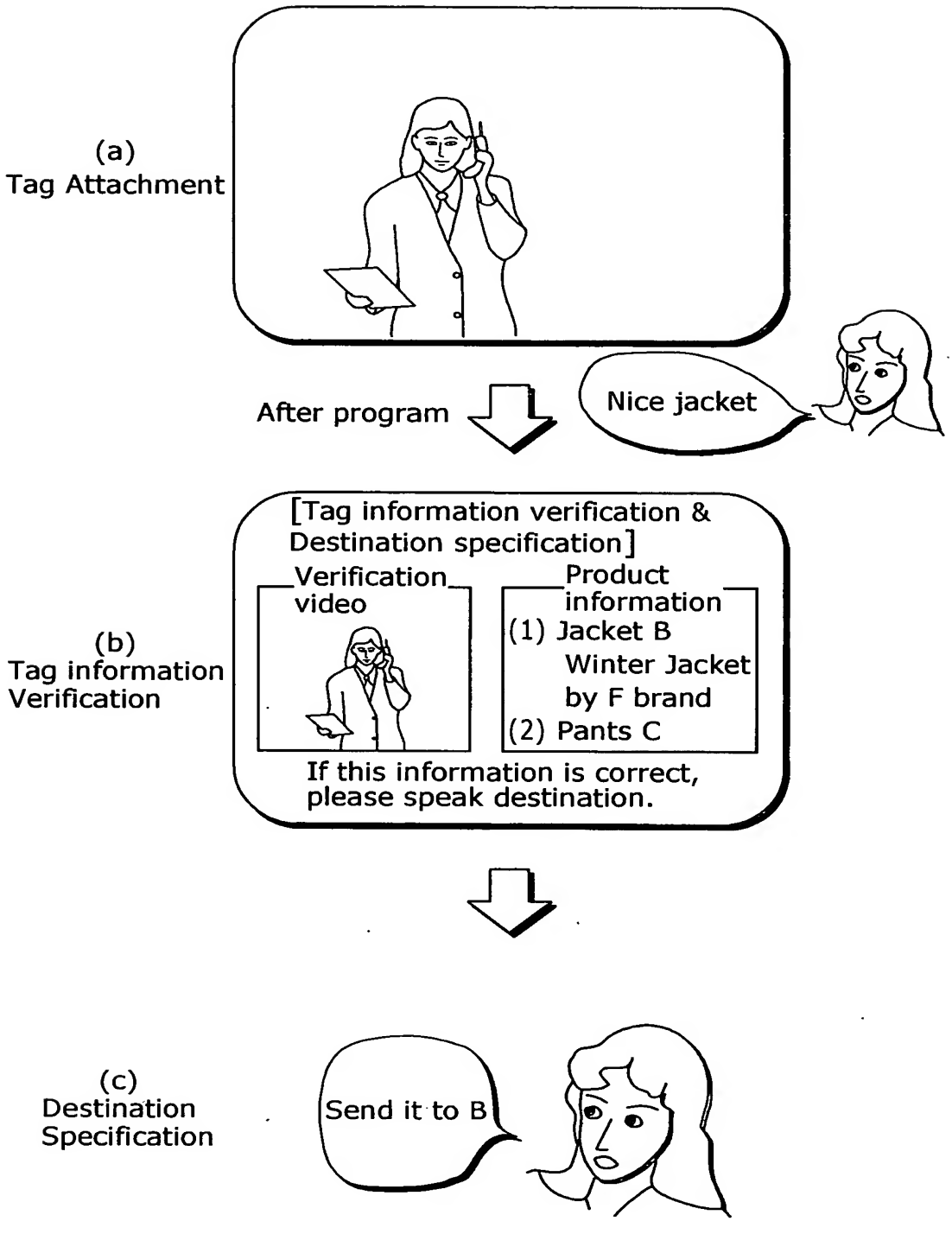

(a)
Tag Attachment
After program
Nice jacket
(b)
Tag information
Verification
[Tag information verification &
Destination specification]
Verification video
Product information
(1) Jacket B
Winter Jacket
by F brand
(2) Pants C
If this information is correct,
please speak destination.
(c)
Destination
Specification
Send it to B

FIG. 14

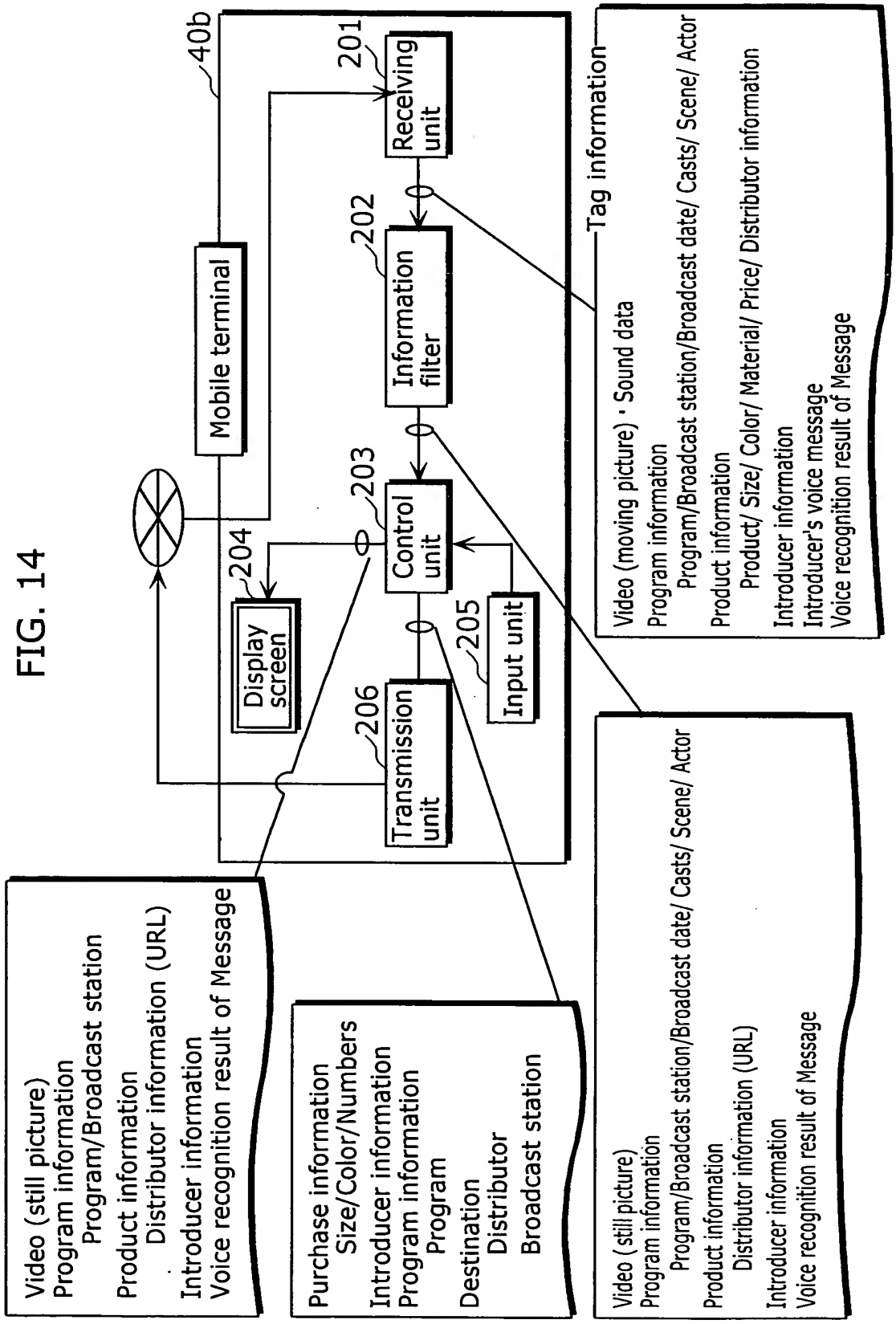

40b
Mobile terminal
201
Receiving unit
202
Information filter
203
Control unit
204
Display screen
205
Input unit
206
Transmission unit
Tag information
Video (moving picture) · Sound data
Program information
Program/Broadcast station/Broadcast date/ Casts/ Scene/ Actor
Product information
Product/ Size/ Color/ Material/ Price/ Distributor information
Introducer information
Introducer's voice message
Voice recognition result of Message
Video (still picture)
Program information
Program/Broadcast station/Broadcast date/ Casts/ Scene/ Actor
Product information
Distributor information (URL)
Introducer information
Voice recognition result of Message
Purchase information
Size/Color/Numbers
Introducer information
Program information
Program
Destination
Distributor
Broadcast station
Video (still picture)
Program information
Program/Broadcast station
Product information
Distributor information (URL)
Introducer information
Voice recognition result of Message

FIG. 15

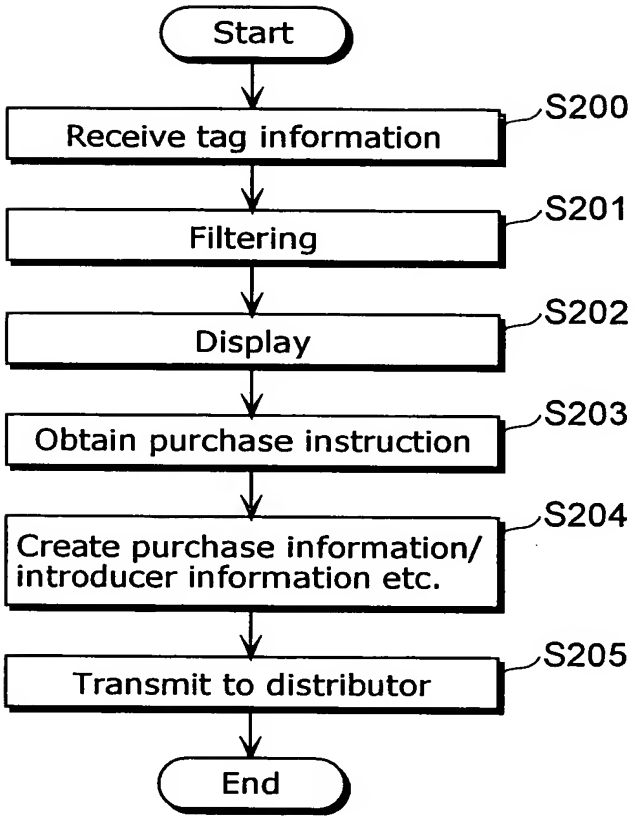

Start
Receive tag information
S200
Filtering
S201
Display
S202
Obtain purchase instruction
S203
Create purchase information/ introducer information etc.
S204
Transmit to distributor
S205
End

FIG. 16

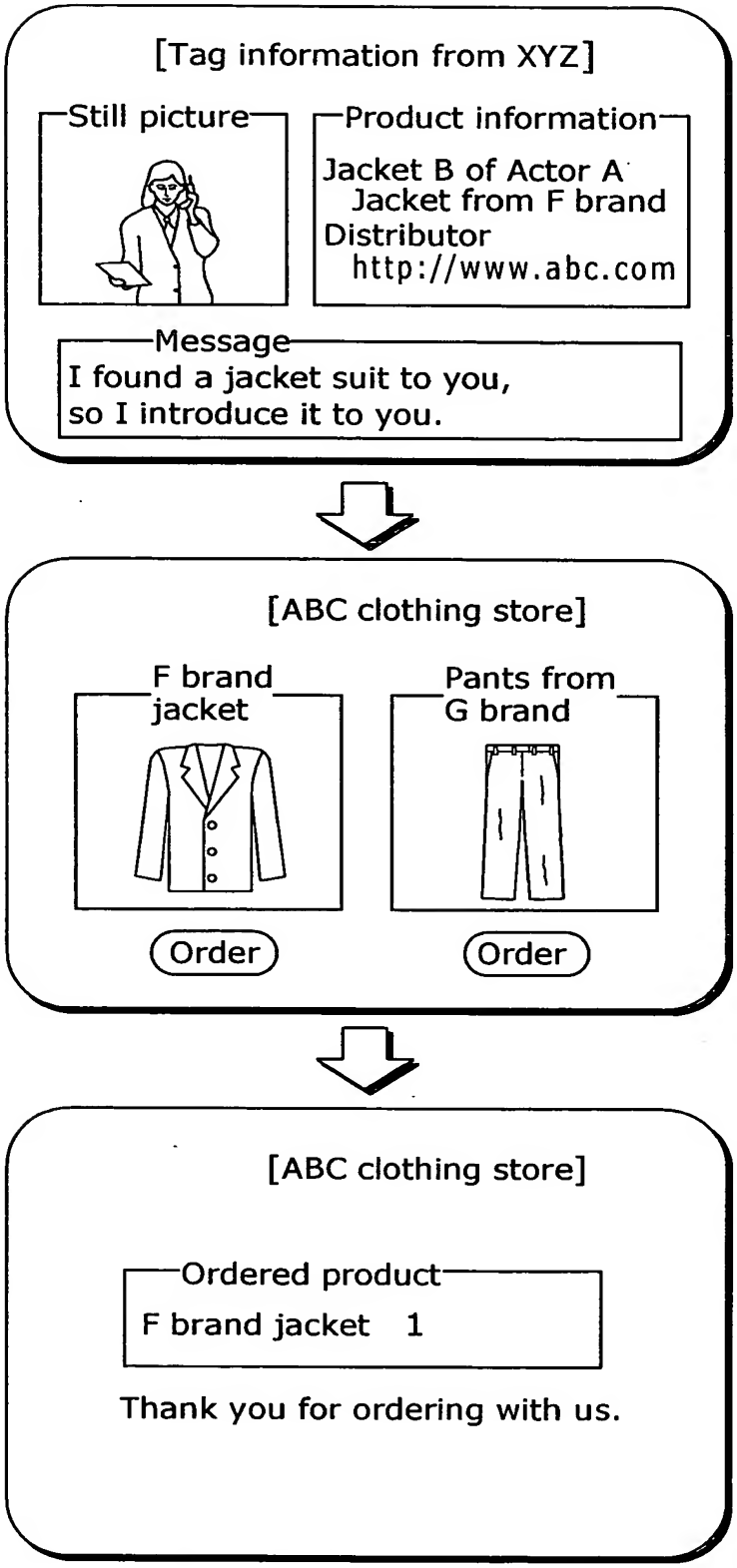
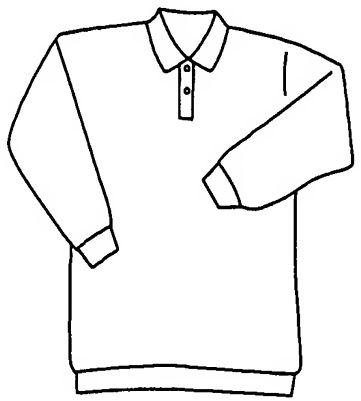

(a)
[Tag information from XYZ]
Still picture
Product information
Jacket B of Actor A
Jacket from F brand
Distributor
http://www.abc.com
Message
I found a jacket suit to you,
so I introduce it to you.
(b)
[ABC clothing store]
F brand jacket
Pants from G brand
Order
Order
(c)
[ABC clothing store]
Ordered product
F brand jacket 1
Thank you for ordering with us.

FIG. 17

Product image



Moving picture

Product information

Men's wear	Polo shirt
Material	Cotton/ Polyester
Color	Red, Navy, Light blue
Size	S M L LL XL
Price	S M L LL \3,200 XL \3,300
Producer	AAA
Distributor	BBB URL http://www.bbb.ccc.*****

Message from XYZ

You were looking for a casual style with beautiful light blue, weren't you? How is this?

FIG. 18

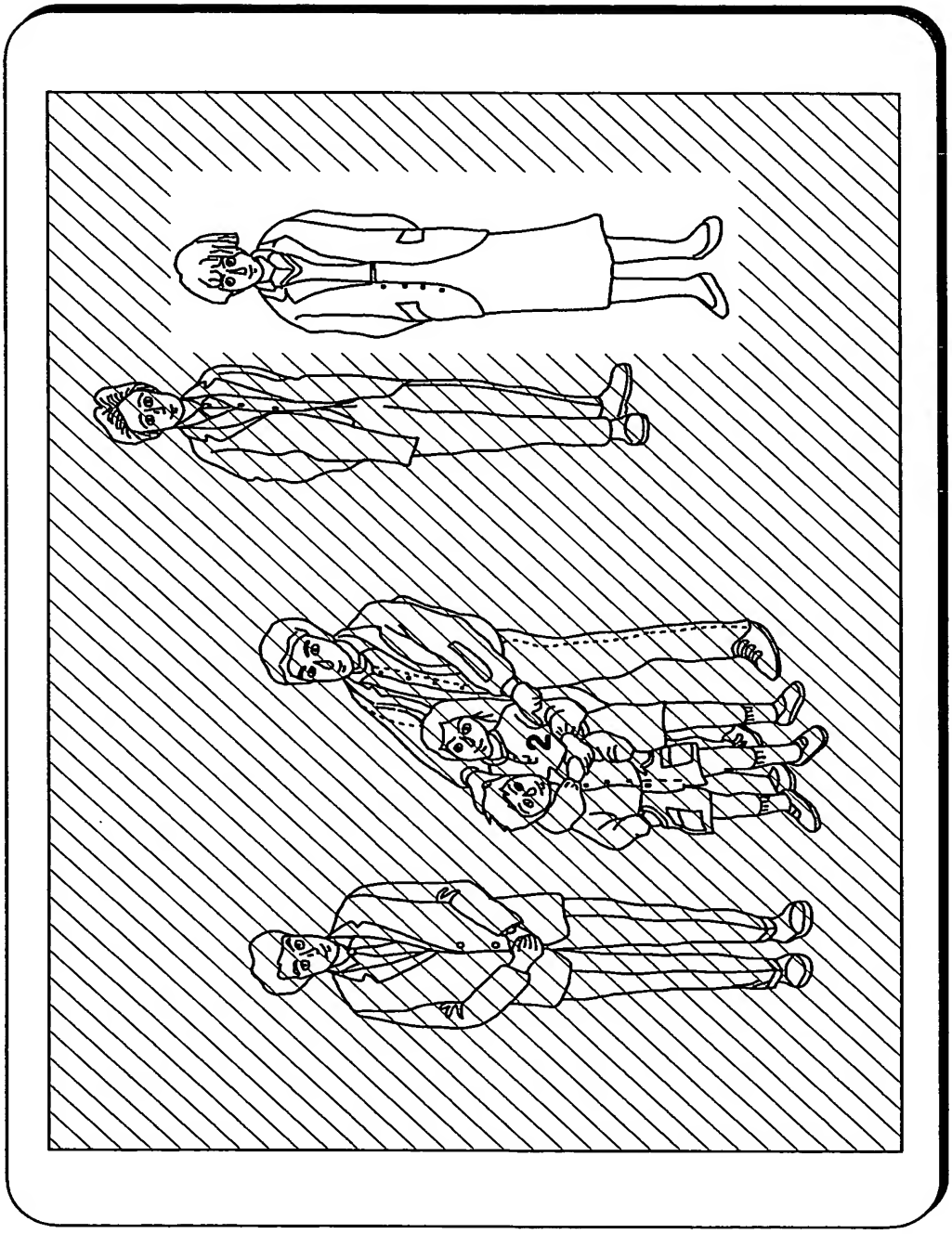


FIG. 19

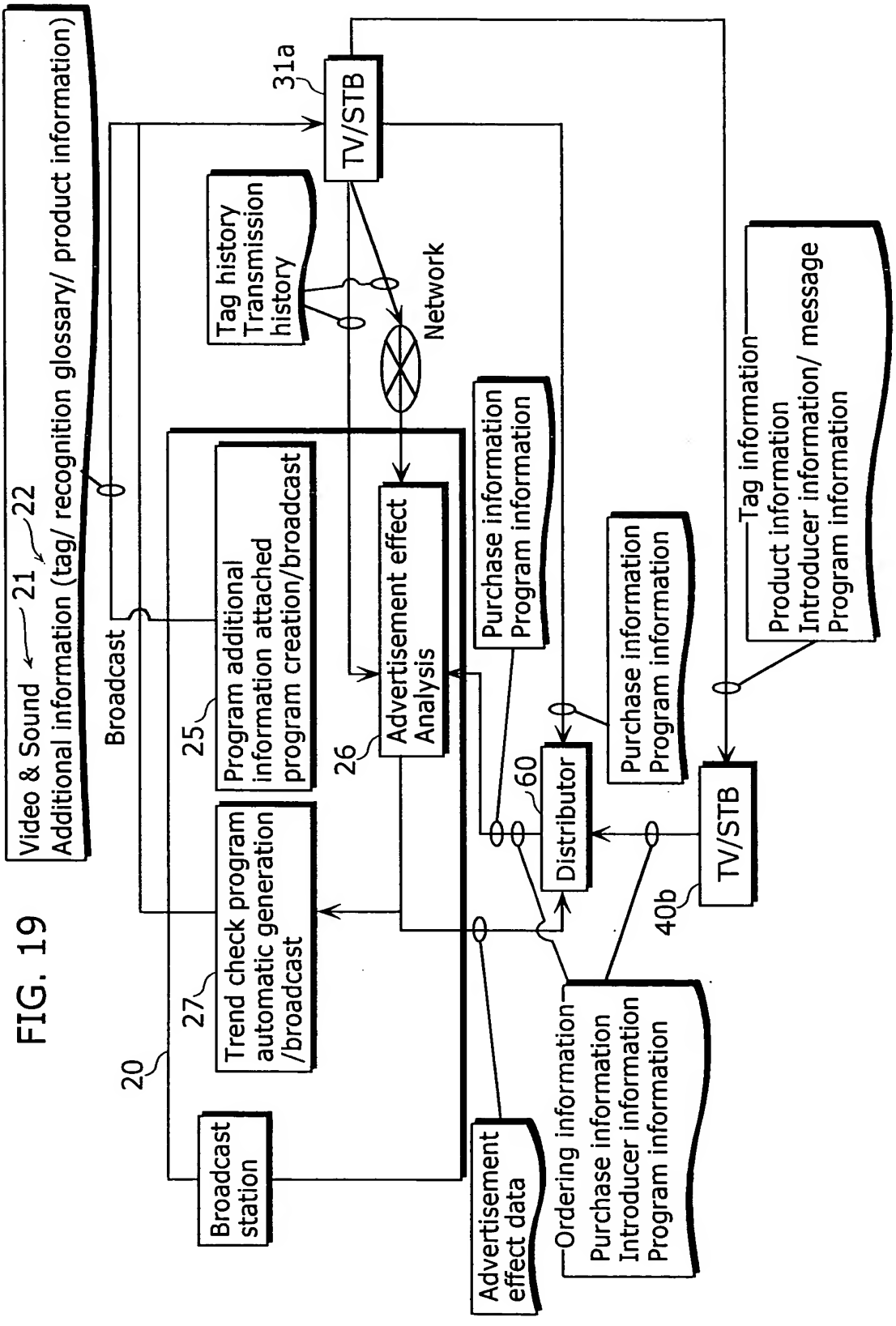

Video & Sound
Additional information (tag/ recognition glossary/ product information)
21
22
Broadcast
31a
TV/STB
Tag history
Transmission history
Network
Program additional information attached program creation/broadcast
25
Advertisement effect Analysis
26
Purchase information
Program information
Tag information
Product information
Introducer information/ message
Program information
Purchase information
Program information
60
Distributor
TV/STB
40b
Trend check program automatic generation /broadcast
27
20
Broadcast station
Advertisement effect data
Ordering information
Purchase information
Introducer information
Program information

FIG. 20A Tag Record · Transmit Record(Purchaser/ Distributor/ Broadcast Station)

Tag NO.	Program information			Product information				Destination information	
	Broadcast Date	Broadcast station	Program ID	Object ID	Product name	Time location	Spatial location	Name	Address
1	2003/02/20 18:00~18:30	ABC broadcast	XY123	J456	F Jacket	T00:02:45 :0F00	(264,125)	B	B@dococo. bb. bb
2	2003/02/20 21:00~21:30		YZ234	Z567	G Pants	T12:54:06 :0403	(124,33)	C	06 1234 5678
.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.

FIG. 20B Ordering Information (Purchaser/ Distributor/ Broadcast Station)

Order NO.	Purchase information					Introducer information		Program information		
	Purchasing date	Purchaser	Purchaser address	Object ID	Product name	Introducer	Introducer address	Broadcast Date	Broadcast station	Program ID
1	2003/02/25	D	D@doco. com	K678	Bag	E	0398765432	2003/02/25 10:00~10:30	FGH	PQ678
2	2003/02/21	B	B@dococo.bb.bb	J456	Jacket	A	A@doco.com	2003/02/20 18:00~18:30	ABC	XY123
.	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.	.

10/532676

FIG. 21

26a

Item NO.	Analyzed item	Analysis details
1	Popular program for tag attachment	Analyze number of tags attached in a month for each program and specify best 10
2	Popular program for topicality	Analyze number of times when tag information is transferred among viewers in a month for each program and specify best 10
3	Highly introduced program	Specify best 10 programs with high ratio of the number of transfers causing purchase of product among the number of tagged information transferred among viewers in a month
. . .	. . .	. . .

FIG. 22

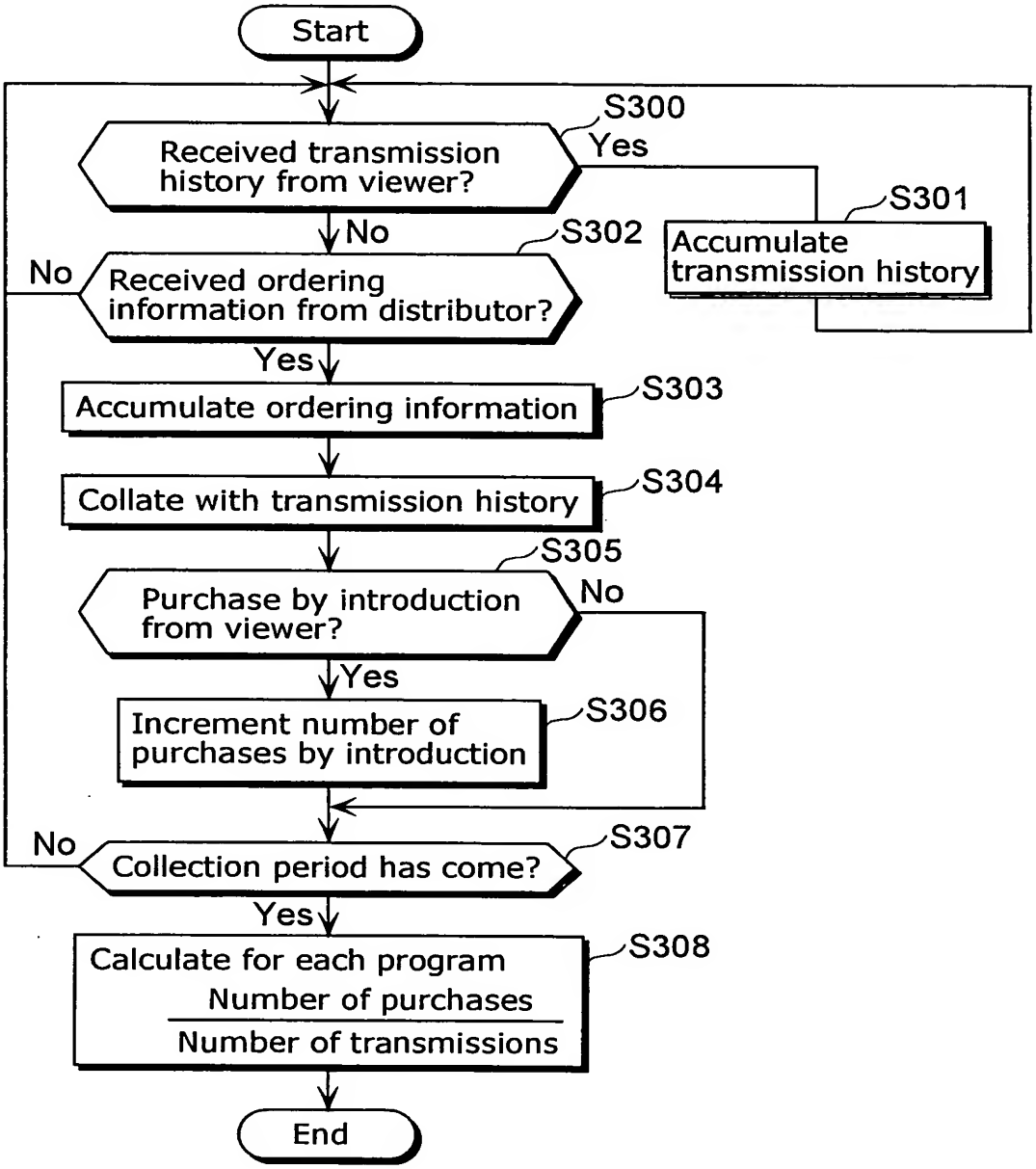

Start
S300
Received transmission history from viewer?
Yes
S301
Accumulate transmission history
No
S302
No
Received ordering information from distributor?
Yes
Accumulate ordering information
S303
Collate with transmission history
S304
S305
Purchase by introduction from viewer?
No
Yes
Increment number of purchases by introduction
S306
No
Collection period has come?
S307
Yes
Calculate for each program
Number of purchases
Number of transmissions
S308
End

FIG. 23

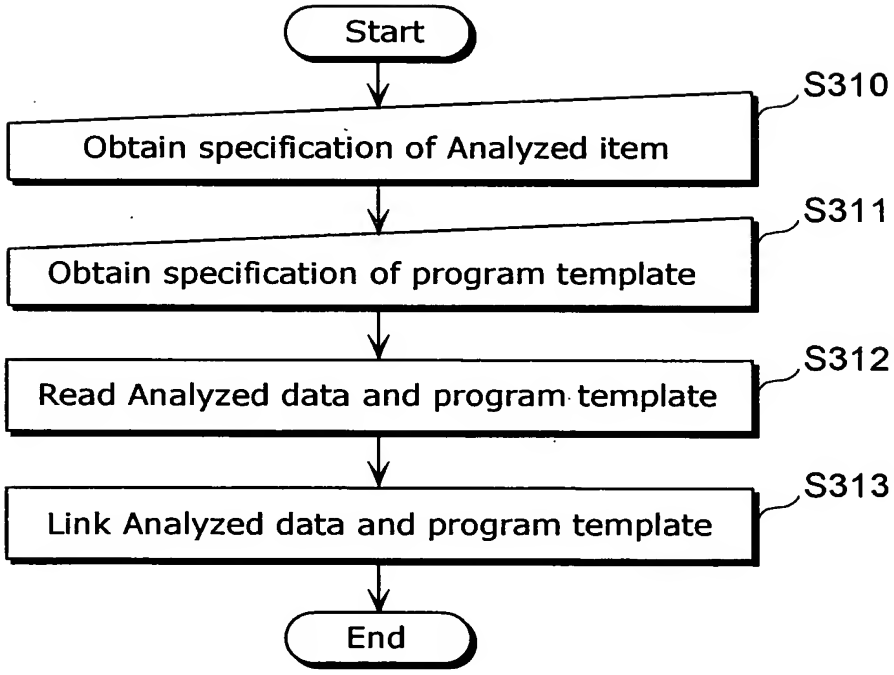

Start
S310
Obtain specification of Analyzed item
S311
Obtain specification of program template
S312
Read Analyzed data and program template
S313
Link Analyzed data and program template
End

FIG. 24

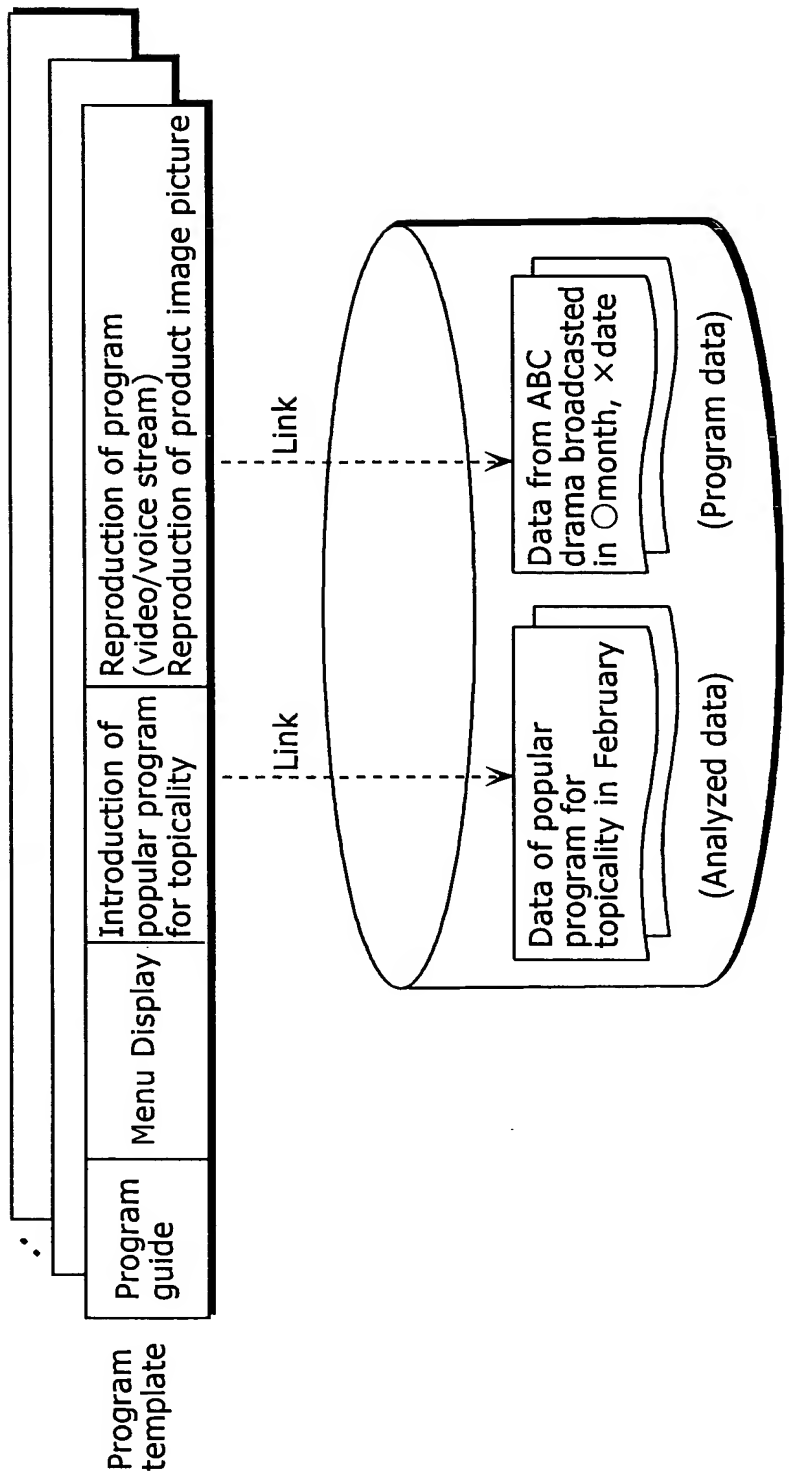

Program template
Program guide
Menu Display
Introduction of popular program for topicality
Reproduction of program (video/voice stream) Reproduction of product image picture
t
Link
Link
Data of popular program for topicality in February
Data from ABC drama broadcasted in ○month, ×date
(Analyzed data)
(Program data)

FIG. 25A

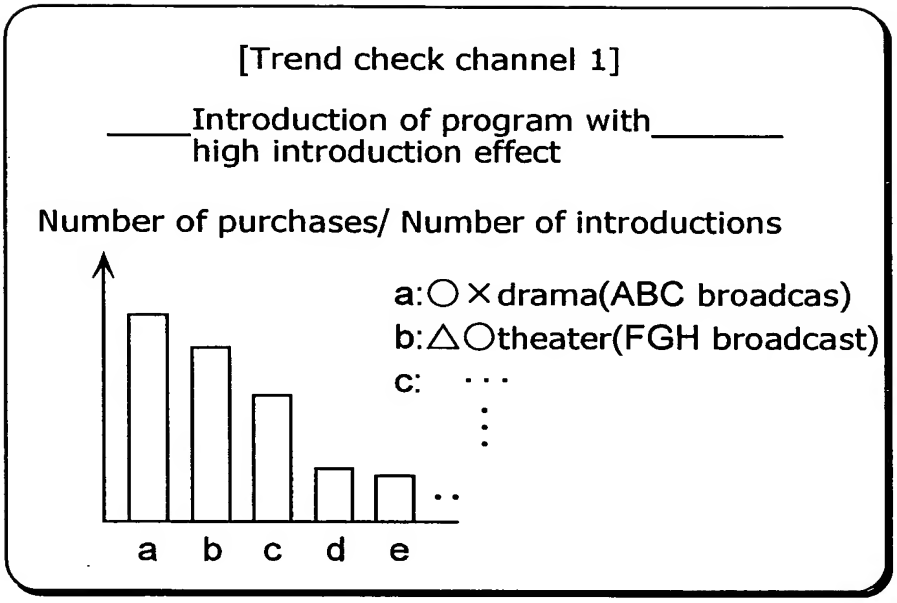
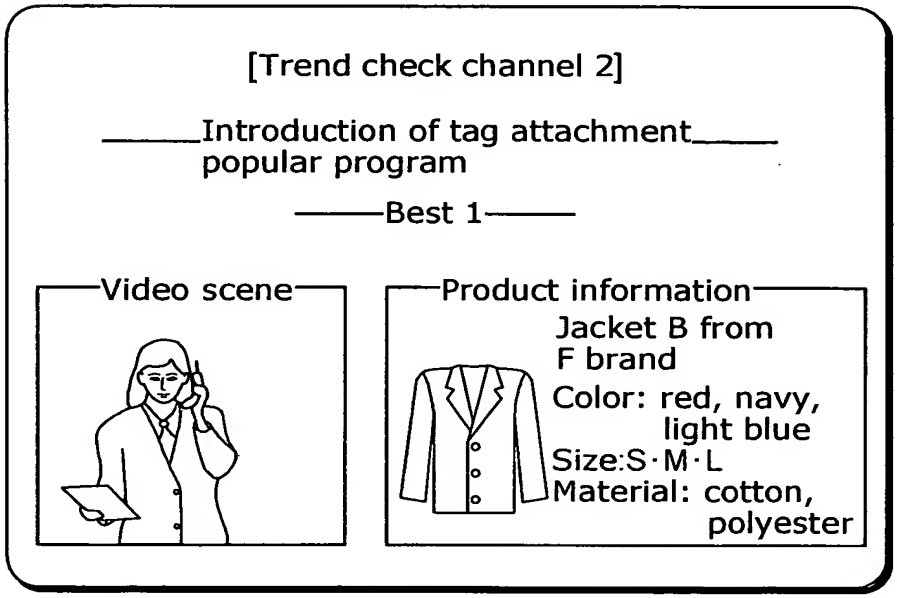



FIG. 25B